



U.S. Appln. No. 10/606,233 -- amended claims

1. (currently amended) A device for holding a piece
in a bore, comprising:

a cylindrical sleeve constructed to be inserted into
the bore and held therein by engagement of its outer
surface with an inner surface of the bore, the ends of the
sleeve being substantially identical and exposed for
insertion in the bore;

and a series of fins extending longitudinally of an
inner surface of the sleeve and projecting inwardly from
the inner surface of the sleeve, the fins being spaced from
each other circumferentially of the sleeve with tips
disposed to engage an outer surface of a piece inserted
into the sleeve,

wherein the sleeve and the fins are integrally formed
of resilient flexible plastic, the fins are skewed in a
same circumferential direction relative to radial planes of
the sleeve, a dimension of each fin along a direction of
its inward projection is substantially greater than the
thickness of the fin, and a dimension of each fin
longitudinally of an inner surface of the sleeve is a
plurality of times greater than the thickness of the fin,
and the flexibility of the fins is such that the fins can

be readily deflected when engaged by an inserted piece.

2. (previously presented) A device for holding a piece in a bore, comprising:

a cylindrical sleeve constructed to be inserted into the bore and held therein by engagement of its outer surface with an inner surface of the bore;

and a series of fins extending longitudinally of an inner surface of the sleeve and projecting inwardly from the inner surface of the sleeve, the fins being spaced from each other circumferentially of the sleeve with tips disposed to engage an outer surface of a piece inserted into the sleeve,

wherein the sleeve and the fins are integrally formed of resilient flexible plastic, the fins are skewed in a same circumferential direction relative to radial planes of the sleeve, a dimension of each fin along a direction of its inward projection is substantially greater than the thickness of the fin, and the flexibility of the fins is such that the fins can be readily deflected when engaged by an inserted piece, and

wherein the fins have longitudinal ends that face longitudinal ends of the sleeve, respectively, and at least one longitudinal end of the fins extends away from the

respective longitudinal end of the sleeve and away from the inner surface of the sleeve.

3. (original) A device according to Claim 2, wherein each fin has trapezoidal longitudinal side surfaces.

4. (original) A device according to Claim 1, wherein the device is formed of molded plastic.

5. (withdrawn) A device according to claim 4, wherein the device further comprises a plurality of abutments projecting inwardly from the inner surface of the sleeve for engagement with ejector pins of molding apparatus, the abutments are spaced inwardly from the longitudinal ends of the sleeve, and the sleeve has slots aligned with the abutments to permit engagement of the ejector pins with the abutments.

6. (withdrawn) A device according to claim 1, wherein the longitudinal ends of the fins are spaced from the respective longitudinal ends of the sleeve.

7. (original) A device according to Claim 1, wherein the fins extend to the longitudinal ends of the sleeve.

8. (original) A device according to claim 1, wherein end portions of the sleeve adjacent to the longitudinal ends of the sleeve, respectively, have an outer diameter that increases away from the respective longitudinal ends

of the sleeve.

9. (withdrawn) A device according to Claim 8, wherein the longitudinal ends of the fins are spaced from the respective longitudinal ends of the sleeve and said end portions have a substantially uniform inner diameter between the respective longitudinal ends of the sleeve and the fins.

10. (withdrawn) A device according to Claim 8, wherein the longitudinal ends of the fins are spaced from the respective longitudinal ends of the sleeve and said end portions have an inner diameter that increases between the respective longitudinal ends of the sleeve and the fins.

11. (original) A device according to Claim 1, wherein the longitudinal ends of the sleeve are flat.

12. (original) A device comprising:
a cylindrical sleeve;
and a series of fins extending longitudinally of an inner surface of the sleeve and projecting inwardly from the inner surface of the sleeve, the fins being spaced from

each other circumferentially of the sleeve with tips disposed to engage an outer surface of a piece inserted into the sleeve,

wherein the sleeve and the fins are integrally formed of resilient flexible plastic, the fins are skewed relative to radial planes of the sleeve, the flexibility of the fins is such that the fins can be readily deflected when engaged by an inserted piece, and each fin is tapered by having at least one longitudinal end that extends away from a respective longitudinal end of the sleeve and away from the inner surface of the sleeve.

13. (original) A device according to Claim 12, wherein each fin has trapezoidal longitudinal side surfaces.

14. (original) A device according to Claim 12, wherein the fins are skewed in a same circumferential direction relative to radial planes of the sleeve and a dimension of each fin along a direction of its inward projection is substantially greater than the thickness of the fin.

15. (original) A device according to Claim 12, wherein the device is formed of molded plastic.

16. (withdrawn) A device according to Claim 15, wherein the device further comprises a plurality of abutments projecting inwardly from the inner surface of the sleeve for engagement with ejector pins of molding apparatus, the abutments are spaced inwardly from the longitudinal ends of the sleeve, and the sleeve has slots aligned with the abutments to permit engagement of the ejector pins with the abutments.

17. (withdrawn) A device according to Claim 12, wherein the longitudinal ends of the fins are spaced from the respective longitudinal ends of the sleeve.

18. (original) A device according to Claim 12, wherein the fins extend to the longitudinal ends of the sleeve.

19. (original) A device according to Claim 12, wherein end portions of the sleeve adjacent to the longitudinal ends of the sleeve, respectively, have an outer diameter that increases away from the respective longitudinal ends.

20. (withdrawn) A device according to Claim 19, wherein the longitudinal ends of the fins are spaced from the respective longitudinal ends of the sleeve and said end portions have a substantially uniform inner diameter between the respective longitudinal ends of the sleeve and the fins.

21. (withdrawn) A device according to Claim 19, wherein the longitudinal ends of the fins are spaced from the respective longitudinal ends of the sleeve and said end portions have an inner diameter that increases between the respective longitudinal ends of the sleeve and the fins.

22. (original) A device according to Claim 12, wherein the longitudinal ends of the sleeve are flat.

23. (currently amended) A device for holding a piece in a bore, comprising:

a cylindrical sleeve constructed to be inserted into the bore and held therein by engagement of its outer surface with an inner surface of the bore;

and a series of fins extending longitudinally of an inner surface of the sleeve and projecting inwardly from the inner surface of the sleeve, the fins being spaced from each other circumferentially of the sleeve with tips disposed to engage an outer surface of a piece inserted into the sleeve,

wherein the sleeve and the fins are integrally formed of resilient flexible plastic, the fins are skewed in a same circumferential direction relative to radial planes of the sleeve, a dimension of each fin along a direction of its inward projection is substantially greater than the thickness of the fin, and the flexibility of the fins is such that the fins can be readily deflected when engaged by an inserted piece;

wherein the fins have longitudinal ends that face

longitudinal ends of the sleeve, respectively, and ~~at least one~~each longitudinal end of the fins extends away from the respective longitudinal end of the sleeve and away from the inner surface of the sleeve; and

wherein each fin has trapezoidal longitudinal side surfaces.

24. (withdrawn) A device for holding a piece in a bore, comprising:

a cylindrical sleeve constructed to be inserted into the bore and held therein by engagement of its outer surface with an inner surface of the bore;

and a series of fins extending longitudinally of an inner surface of the sleeve and projecting inwardly from the inner surface of the sleeve, the fins being spaced from each other circumferentially of the sleeve with tips disposed to engage an outer surface of a piece inserted into the sleeve,

wherein the sleeve and the fins are integrally formed of resilient flexible plastic, the fins are skewed in a same circumferential direction relative to radial planes of the sleeve, a dimension of each fin along a direction of its inward projection is substantially greater than the

thickness of the fin, and the flexibility of the fins is such that the fins can be readily deflected when engaged by an inserted piece;

wherein the device is formed of molded plastic; and

wherein the device further comprises a plurality of abutments projecting inwardly from the inner surface of the sleeve for engagement with ejector pins of molding apparatus, the abutments are spaced inwardly from the longitudinal ends of the sleeve, and the sleeve has slots aligned with the abutments to permit engagement of the ejector pins with the abutments.

25. (withdrawn) A device for holding a piece in a bore, comprising:

a cylindrical sleeve constructed to be inserted into the bore and held therein by engagement of its outer surface with an inner surface of the bore;

and a series of fins extending longitudinally of an inner surface of the sleeve and projecting inwardly from the inner surface of the sleeve, the fins being spaced from each other circumferentially of the sleeve with tips disposed to engage an outer surface of a piece inserted into the sleeve,

wherein the sleeve and the fins are integrally formed of resilient flexible plastic, the fins are skewed in a same circumferential direction relative to radial planes of the sleeve, a dimension of each fin along a direction of its inward projection is substantially greater than the thickness of the fin, and the flexibility of the fins is such that the fins can be readily deflected when engaged by an inserted piece; and

wherein the longitudinal ends of the fins are spaced from the respective longitudinal ends of the sleeve.

26. (previously presented) A device for holding a piece in a bore, comprising:

a cylindrical sleeve constructed to be inserted into the bore and held therein by engagement of its outer surface with an inner surface of the bore;

and a series of fins extending longitudinally of an inner surface of the sleeve and projecting inwardly from the inner surface of the sleeve, the fins being spaced from each other circumferentially of the sleeve with tips disposed to engage an outer surface of a piece inserted into the sleeve,

wherein the sleeve and the fins are integrally formed

of resilient flexible plastic, the fins are skewed in a same circumferential direction relative to radial planes of the sleeve, a dimension of each fin along a direction of its inward projection is substantially greater than the thickness of the fin, and the flexibility of the fins is such that the fins can be readily deflected when engaged by an inserted piece; and

wherein end portions of the sleeve adjacent to the longitudinal ends of the sleeve, respectively, have an outer diameter that increases away from the respective longitudinal ends of the sleeve.

27. (withdrawn) A device according to Claim 26, wherein the longitudinal ends of the fins are spaced from the respective longitudinal ends of the sleeve and said end portions have a substantially uniform inner diameter between the respective longitudinal ends of the sleeve and the fins.

28. (withdrawn) A device according to Claim 26, wherein the longitudinal ends of the fins are spaced from the respective longitudinal ends of the sleeve and said end portions have an inner diameter that increases between the

respective longitudinal ends of the sleeve and the fins.

29. (previously presented) A device for holding a piece in a bore, comprising:

a cylindrical sleeve constructed to be inserted into the bore and held therein by engagement of its outer surface with an inner surface of the bore, the ends of the sleeve being substantially identical and exposed for insertion in the bore;

and a series of fins extending longitudinally of an inner surface of the sleeve and projecting inwardly from the inner surface of the sleeve, the fins being spaced from each other circumferentially of the sleeve with tips free from one another and disposed to engage an outer surface of a piece inserted into the sleeve,

wherein the sleeve and the fins are integrally formed of resilient flexible plastic, the fins are skewed in a same circumferential direction relative to radial planes of the sleeve, a dimension of each fin along a direction of its inward projection is substantially greater than the thickness of the fin, and the flexibility of the fins is such that the fins can be readily deflected when engaged by an inserted piece.

30. (previously presented) A device according to claim 26, wherein the fins have longitudinal ends that face longitudinal ends of the sleeve, respectively, and at least one longitudinal end of the fins extends away from the respective longitudinal end of the sleeve and away from the inner surface of the sleeve.

31. (previously presented) A device according to Claim 30, wherein each fin has trapezoidal longitudinal side surfaces.

32. (previously presented) A device according to Claim 26, wherein the device is formed of molded plastic.

33. (withdrawn) A device according to claim 32, wherein the device further comprises a plurality of abutments projecting inwardly from the inner surface of the sleeve for engagement with ejector pins of molding apparatus, the abutments are spaced inwardly from the longitudinal ends of the sleeve, and the sleeve has slots aligned with the abutments to permit engagement of the ejector pins with the abutments.

34. (withdrawn) A device according to claim 26, wherein the longitudinal ends of the fins are spaced from the respective longitudinal ends of the sleeve.

35. (previously presented) A device according to Claim 26, wherein the fins extend to the longitudinal ends of the sleeve.

Claim 36 (cancelled)

37. (withdrawn — currently amended) A device according to Claim ~~36~~26, wherein the longitudinal ends of the fins are spaced from the respective longitudinal ends of the sleeve and said end portions have a substantially uniform inner diameter between the respective longitudinal ends of the sleeve and the fins.

38. (withdrawn) A device according to Claim 26, wherein the longitudinal ends of the fins are spaced from the respective longitudinal ends of the sleeve and said end portions have an inner diameter that increases between the respective longitudinal ends of the sleeve and the fins.

39. (previously presented) A device according to Claim 26, wherein the longitudinal ends of the sleeve are flat.

40. (currently amended) A device for holding a piece in a bore, comprising:

a cylindrical sleeve constructed to be inserted into the bore and held therein by engagement of its outer surface with an inner surface of the bore, the ends of the sleeve being substantially identical and exposed for insertion in the bore;

and a series of fins extending longitudinally of an inner surface of the sleeve and projecting inwardly from the inner surface of the sleeve, the fins being spaced from each other circumferentially of the sleeve with tips disposed to engage an outer surface of a piece inserted into the sleeve,

wherein the sleeve and the fins are integrally formed of resilient flexible plastic, the fins are skewed in a same circumferential direction relative to radial planes of the sleeve, a dimension of each fin along a direction of its inward projection is substantially greater than the thickness of the fin, a dimension of each fin longitudinally of the inner surface of the sleeve is substantially greater than a dimension of each fin along a direction of its inward projection, and the flexibility of the fins is such that the fins can be readily deflected when engaged by an inserted piece.

41. (previously presented) A device according to claim 40, wherein the fins have longitudinal ends that face longitudinal ends of the sleeve, respectively, and at least one longitudinal end of the fins extends away from the respective longitudinal end of the sleeve and away from the inner surface of the sleeve.

42. (previously presented) A device according to Claim 41, wherein each fin has trapezoidal longitudinal side surfaces.

43. (previously presented) A device according to Claim 40, wherein the device is formed of molded plastic.

44. (withdrawn) A device according to claim 43, wherein the device further comprises a plurality of abutments projecting inwardly from the inner surface of the sleeve for engagement with ejector pins of molding apparatus, the abutments are spaced inwardly from the longitudinal ends of the sleeve, and the sleeve has slots aligned with the abutments to permit engagement of the ejector pins with the abutments.

45. (withdrawn) A device according to claim 40, wherein the longitudinal ends of the fins are spaced from the respective longitudinal ends of the sleeve.

46. (previously presented) A device according to Claim 40, wherein the fins extend to the longitudinal ends of the sleeve.

47. (previously presented) A device according to claim 40, wherein end portions of the sleeve adjacent to the longitudinal ends of the sleeve, respectively, have an outer diameter that increases away from the respective

longitudinal ends of the sleeve.

48. (withdrawn) A device according to Claim 47, wherein the longitudinal ends of the fins are spaced from the respective longitudinal ends of the sleeve and said end portions have a substantially uniform inner diameter between the respective longitudinal ends of the sleeve and the fins.

49. (withdrawn) A device according to Claim 47, wherein the longitudinal ends of the fins are spaced from the respective longitudinal ends of the sleeve and said end portions have an inner diameter that increases between the respective longitudinal ends of the sleeve and the fins.

50. (previously presented) A device according to Claim 40, wherein the longitudinal ends of the sleeve are flat.

51. (currently amended) A device for holding a piece in a bore, comprising:

a cylindrical sleeve constructed to be inserted into the bore and held therein by engagement of its outer

surface with an inner surface of the bore, the ends of the sleeve being substantially identical and exposed for insertion in the bore;

and a series of fins extending longitudinally of an inner surface of the sleeve and projecting inwardly from the inner surface of the sleeve, the fins being spaced from each other circumferentially of the sleeve with tips free from one another and disposed to engage an outer surface of a piece inserted into the sleeve,

wherein the sleeve and the fins are integrally formed of resilient flexible plastic, the fins are skewed in a same circumferential direction relative to radial planes of the sleeve, a dimension of each fin along a direction of its inward projection is substantially greater than the thickness of the fin, a dimension of each fin longitudinally of an inner surface of the sleeve is a plurality of times greater than the thickness of the fin and is substantially greater than a dimension of each fin along a direction of its inward projection, and the flexibility of the fins is such that the fins can be readily deflected when engaged by an inserted piece.

52. (currently amended) A device according to claim 1, where the axial length of the sleeve is substantially greater than the wall thickness of the sleeve.

53. (currently amended) A device according to claim 23, where the axial length of the sleeve is substantially greater than the wall thickness of the sleeve.

54. (currently amended) A device according to claim 29, where the axial length of the sleeve is substantially greater than the wall thickness of the sleeve.

55. (currently amended) A device according to claim 40, where the axial length of the sleeve is substantially greater than the wall thickness of the sleeve.

56. (currently amended) A device according to claim 51, where the axial length of the sleeve is substantially greater than the wall thickness of the sleeve.

57. (currently amended) A device according to claim 1, wherein there are ~~of the order of~~ about 9 fins.

58. (currently amended) A device according to claim 23, wherein there are ~~of the order of~~about 9 fins.

59. (currently amended) A device according to claim 29, wherein there are ~~of the order of~~about 9 fins.

60. (currently amended) A device according to claim 40, wherein there are ~~of the order of~~about 9 fins.

61. (currently amended) A device according to claim 51, wherein there are ~~of the order of~~about 9 fins.

62. (new) A device according to Claim 8, wherein the fins have longitudinal ends that face longitudinal ends of the sleeve, respectively, and the longitudinal ends of the fins extend away from the respective longitudinal ends of the sleeve and away from the inner surface of the sleeve.